

RELATIONSHIP OF LAB OR CHARACTERISTICS TO ELECTROLYTE LEVELS IN THE BLOOD OF WORKERS IN HOT ENVIRONMENT

(Case Study of Home Industry Crackers in Village Tlasi, Subdistrict
Tulangan in 2021)

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ABSTRACT

Work climate is a combination of working air temperature, humidity, speed of air movement and radiation temperature associated with heat work by the body. Uncomfortable working weather, not in accordance with the specified conditions can reduce work capacity which results in decreased work efficiency and productivity.

This study aims to determine the relationship between the characteristics of the workforce with electrolyte levels in the blood of workers and the relationship between drinking water intake and electrolyte levels in the blood of workers at the home industry of crackers in Tlasi village, Tulangan district. The type of research used is analytic observational through a cross sectional approach. Sampling using simple random sampling method with the required number of samples as many as 31 workers from a population of 33 workers in the production department. Data collection techniques were carried out by bivariate, univariate and descriptive observations and measurements.

The results showed that the work climate accepted by the workers was 100% $>28.2^{\circ}\text{C}$ with the highest temperature reaching 30.9°C . From the results of the analysis there is no relationship between nutritional status and blood electrolyte levels of workers, p value = 0.326 ($p > 0.05$), there is a relationship between age and blood electrolyte levels of workers, p value = 0.007 ($p < 0.05$), there is no relationship between working period and electrolyte levels in the blood, the value of $p = 0.213$ ($p > 0.05$) and there is no relationship between the levels of electrolytes in the blood of workers with drinking water intake, the value is from $p = 0.094$ ($p > 0.05$), then The cracker home industry is advised to conduct counseling about the dangers of electrolyte deficiency and the dangers of an unqualified work climate in the workplace.

Keywords: Electrolyte, Characteristics, Hot Working Climate